

900 E. Broad Street, Room 511
Richmond, VA 23219

October 19, 2018

Dear Mark Olinger and Maritza Pechin:

I am writing today on behalf of the Virginia Energy Efficiency Council (VAEEC) to provide comments on Richmond 300, the City of Richmond's Master Plan. Energy Efficiency is one of the most practical, no-cost / low-cost tools to spur economic development and to reduce our energy consumption and dependency on fossil fuels. In fact, many analyses have found energy efficiency measures to be the most cost-effective and quickest way to address climate change while simultaneously reducing energy usage and cutting utility bills. According to a report by the American Council for an Energy-Efficient Economy (ACEEE), energy efficiency programs across the United States have reduced carbon pollution by 490 million tons and saved individual households, on average, \$840 in 2015. Energy efficiency has a lot to offer the City and should therefore be included in the Richmond 300 plan.

The VAEEC is a 501c3 organization, headquartered in Richmond, providing a platform for stakeholder engagement while assessing and supporting programs and policies that advance energy efficiency in Virginia. We engage our members to identify barriers and opportunities to energy efficiency advancement in Virginia, and to develop a strong, fact-based and balanced industry voice before local, state and national policymakers and regulators. Our diverse group of nearly 100 members includes Fortune 500 companies, nonprofits, local governments (including the City of Richmond), state agencies, utilities and individuals. The VAEEC's goal is to ensure that energy efficiency is recognized as an integral part of Virginia's economy and clean energy future.

The VAEEC is currently focused on several program areas which reflect our role in advancing innovative and effective strategies in the energy efficiency field: launching Commercial Property Assessed Clean Energy (C-PACE) financing; advocating for rigorous energy requirements in the Virginia Uniform Statewide Building Code; expanding utility energy efficiency programs; and supporting benchmarking and data access initiatives. Expanding energy efficiency provides Virginia residents with affordable energy bills and healthier, more comfortable homes and work environments.

Our comments on the Richmond 300 Master Plan focus on two key areas of financing and benchmarking, which will not only help VAEEC with our mission, but also help the City reduce carbon emissions and spur economic development.

Financing

Two opportunities to initiate funding for energy efficiency projects are to utilize Energy Performance Contracting and to implement a Commercial Property Assessed Clean Energy program for the City of Richmond.

Energy Performance contracting (EPC) is a great financing mechanism to reduce energy usage in public buildings and should be included in the Richmond 300 plan. EPC is generally equipment

replacement that allows energy savings and installation of building control systems to control energy consumption. Energy Service Companies, or ESCOs, provide all of the labor, materials, equipment, and subcontractor management while often requiring little supervision. As an added incentive, customers are guaranteed savings. If the ESCO does not meet the guaranteed savings, they must write a check for the difference and make needed changes at their cost.

Virginia's public buildings have an estimated \$3B in deferred maintenance, half of which is energy related; EPC addresses these needs. According to Janet Tribble formerly with Siemens, "Energy performance contracting is a way for public bodies to get the capital improvements that they need through energy and operational savings that are guaranteed". Like many universities, Virginia Commonwealth University, located here in Richmond, has a growing deferred maintenance backlog. They partnered with Schneider Electric to utilize an energy performance contract on a stadium lighting project, which cost \$465K and has a guaranteed cost savings of \$68K per year. According to Carl Beckelheimer with VCU, EPC allowed the school to address a deferred maintenance issue before the equipment stopped working. "Without being able to utilize the performance contract, we would be waiting until [the lighting system] broke and then trying to find money." Due to the success of this project, VCU is planning to utilize another energy performance contract for a project costing \$18.9M with annual expected savings of \$1.3M.

Additionally, Trane has been able to save their public-sector clients 20-40% on their energy bills through EPCs. These expenses are recovered through energy upgrades, at no additional cost to taxpayers, through work that pays for itself. Over the next 10-15 years, Trane estimates that there is more than \$1B in untapped self-paying energy efficiency projects in public building still left to do in Virginia. EPC can help address urgent building needs and significantly reduce deferred maintenance.

The VAEEC encourages the City of Richmond to use EPC as a way to replace aging equipment in city-owned buildings and to become more energy efficient. Since 2001, state and local governments and institutions of public higher education have invested nearly \$900M in EPC, enabling them to save money that can be better utilized elsewhere. EPC should be added to the Richmond 300 plan as an option to enhance the City's commercial buildings, save money on utility bills, and help meet the City's carbon reduction goals.

Commercial Property Assessed Clean Energy (C-PACE) financing is an innovative way to finance clean energy projects on commercial, multifamily, and nonprofit buildings (excluding condos and properties with less than five dwellings). C-PACE loans are designed to be long-term loans (up to 20+ years) secured by a lien that has a priority status equal to a tax assessment, thus senior to a mortgage lien. By setting up a C-PACE program, a locality can enable private sector loans for 100% of total project costs by placing a special assessment lien on the property that the owner repays over time as part of his/her tax or utility bill.

Virginia joined more than 30 states and the District of Columbia in adopting C-PACE legislation. Currently, only one locality in the Commonwealth has launched a C-PACE program; however, several localities are taking steps to create their own programs.

- Arlington County is currently the only Virginia locality with a C-PACE program. The pipeline of projects is growing, and in a milestone for the program, one was recently reviewed with capital providers to determine funding interest.
- Loudoun County staff are in the midst of developing a C-PACE program structure, evaluating options for Program Administration, and drafting an ordinance. These items will be brought to the Board of Supervisors at a future meeting for consideration.
- Fairfax County staff are currently drafting a C-PACE ordinance. The initial draft ordinance has been sent to the County Attorney for review, and it will then be shared with a stakeholder group. The ordinance is scheduled to be considered by the Board of Supervisor's Environmental Committee during their February 2019 meeting.
- The City of Fredericksburg is drafting a C-PACE ordinance. A project is already in line to utilize C-PACE once a program is launched.
- Other localities also looking to move forward with developing a C-PACE program include the Cities of Alexandria and Roanoke and the counties of Albemarle and Stafford.

Several resources are available for localities to reduce the amount of time and effort required to develop and implement a program.

- Model Ordinances: Earlier this year, the VAEEC released a Virginia model ordinance for localities to use when crafting their own program. This ordinance was commissioned following review and input from a wide variety of C-PACE experts in the lending, local government, engineering, legal, and policy fields. An abbreviated ordinance was created by the Virginia PACE Authority, or VPA, using this ordinance as a template. Both ordinances can be viewed on the VAEEC's [C-PACE webpage](#).
- The Mid-Atlantic PACE Alliance, or MAPA, released a [Regional Toolkit](#) this past summer to serve as a resource for stakeholders, including but not limited to local governments. The guidance and resources included in the Toolkit streamlines efforts to develop and launch a C-PACE program.
- [Arlington County's C-PACE program](#) is designed to enable other Virginia localities the ability to quickly and efficiently "ride" their Program Administration contract with SRS. This option eliminates the need for a locality to go through their own Request for Proposals (RFP) process.
- An [RFP template](#) has been created for localities to use when crafting a Request for Proposals for Program Administrator services.

The VAEEC recommends adding the creation of a C-PACE program to the Richmond 300 plan. C-PACE will provide building owners in the City with a way to finance energy efficiency, renewable energy, and water conservation projects that will enhance the City's commercial and multifamily buildings, reduce the City's carbon emissions, and spur economic growth.

Benchmarking

The City of Richmond should add *benchmarking public buildings* to the Richmond 300 plan. Simply measuring and creating awareness of a building's energy use can lead to significant reductions in energy use. Benchmarking is one of the most popular and effective energy measurement tools designed to measure the energy performance of a building over time. According to an Energy STAR report on data savings trends, benchmarked buildings achieve an annual energy savings of approximately 2.4% per year.

Benchmarking building energy data is a critical first step to improve a building's energy performance over time. Tracking the data not only results in operational changes, which spur immediate no-cost / low-cost reductions in energy consumption, but can also be a conduit to increased government efficiency, economic growth, job creation, and comfortable work environments. Implementing benchmarking through the Richmond 300 plan would be an easy way for the City to enhance its building stock, reduce the operating costs of city-owned buildings, and meet the City's carbon reduction goals.

In addition, the [Virginia Energy Plan](#), released by Governor Northam earlier this month, makes several recommendations for state agencies and departments to collaborate with and provide resources to local governments around many of our recommendations, including EPCs, C-PACE and benchmarking. The city has an opportunity to seize on these valuable resources being provided by the Commonwealth that will ultimately help reduce carbon emissions. It is a win-win situation.

There is tremendous potential for new energy efficiency programs in the City of Richmond. By implementing most of the no-cost, low-cost options listed above, we can tap into these new opportunities and spotlight the City of Richmond as a leader in energy efficiency. Thank you for providing us with the opportunity to submit input on the Richmond 300 Master Plan.

Sincerely,

A handwritten signature in black ink that reads "Chelsea Harnish". The signature is written in a cursive, flowing style.

Chelsea Harnish
Executive Director